



OTPI

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/975,723A

DATE: 01/16/2003 TIME: 14:19:52

Input Set : A:\601-1-101N SEQUENCE LISTING.TXT
Output Set: N:\CRF4\01162003\1975723A.raw

4 <110> APPLICANT: Nackman, Gary Foty, Ramsey 7 <120> TITLE OF INVENTION: Improvement of Endothelial Cell-Cell Cohesion 10 <130> FILE REFERENCE: 601-1-101N 12 <140> CURRENT APPLICATION NUMBER: 09/975,723A 13 <141> CURRENT FILING DATE: 2001-10-11 15 <150> PRIOR APPLICATION NUMBER: 60/241,216 16 <151> PRIOR FILING DATE: 2000-10-13 18 <150> PRIOR APPLICATION NUMBER: 60/243,693 19 <151> PRIOR FILING DATE: 2000-10-27 21 <160> NUMBER OF SEQ ID NOS: 2 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0 25 <210> SEQ ID NO: 1 26 <211> LENGTH: 829 27 <212> TYPE: PRT 28 <213> ORGANISM: Homo sapiens 30 <400> SEQUENCE: 1 31 Met Gly Leu Pro Arg Gly Pro Leu Ala Ser Leu Leu Leu Gln Val 33 Cys Trp Leu Gln Cys Ala Ala Ser Glu Pro Cys Arg Ala Val Phe Arg 35 Glu Ala Glu Val Thr Leu Glu Ala Gly Gly Ala Glu Gln Glu Pro Gly 37 Gln Ala Leu Gly Lys Val Phe Met Gly Cys Pro Gly Gln Glu Pro Ala 55 39 Leu Phe Ser Thr Asp Asn Asp Phe Thr Val Arg Asn Gly Glu Thr 70 75 41 Val Gln Glu Arg Arg Ser Leu Lys Glu Arg Asn Pro Leu Lys Ile Phe 85 90 43 Pro Ser Lys Arg Ile Leu Arg Arg His Lys Arg Asp Trp Val Val Ala 105 45 Pro Ile Ser Val Pro Glu Asn Gly Lys Gly Pro Phe Pro Gln Arg Leu 120 47 Asn Gln Leu Lys Ser Asn Lys Asp Arg Asp Thr Lys Ile Phe Tyr Ser 135 49 Ile Thr Gly Pro Gly Ala Asp Ser Pro Pro Glu Gly Val Phe Ala Val 51 Glu Lys Glu Thr Gly Trp Leu Leu Leu Asn Lys Pro Leu Asp Arg Glu 165 170 53 Glu Ile Ala Lys Tyr Glu Leu Phe Gly His Ala Val Ser Glu Asn Gly 185

55 Ala Ser Val Glu Asp Pro Met Asn Ile Ser Ile Ile Val Thr Asp Gln

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56			195					200					205			
	Asn	Asp	His	Lys	Pro	Lys		Thr	Gln	Asp	Thr		Arg	Gly	Ser	Val
58 50	Lou	210 Glu	Glv	Val	T.011	Dro	215 GLV	Thr	Sor	V = 1	Mat	220 Gln	V = 1	Thr	Δla	Thr
	225	Gru	СТУ	vaı	пец	230	СТУ	1111	261	۷ат	235	GIII	Val	1111	Ата	240
		Glu	Asp	Asp	Ala		Tyr	Thr	Tyr	Asn		Val	Val	Ala	Tyr	
62	-		-	_	245		_		-	250	_				255	
63	Ile	His	Ser	Gln	Glu	Pro	Lys	Asp	Pro	His	Asp	Leu	Met	Phe	Thr	Ile
64				260					265					270		
	His	Arg		Thr	Gly	Thr	Ile		Val	Ile	Ser	Ser		Leu	Asp	Arg
66	C1	T	275	Dwo	C1	т	Πb ∞	280	mb ~	т1.	Cln	71 7	285	7.00	Mot	7 an
68	GIU	Lys 290	vaı	PIO	GIU	ı Ar	295	ьеu	TIIL	ire	GIII	300	1111	Asp	Met	ASP
	Glv	Asp	Glv	Ser	Thr	Thr		Ala	Val	Ala	Val		Glu	Ile	Leu	Asp
	305		<i>1</i>			310					315					320
71	Ala	Asn	Asp	Asn	Ala	Pro	Met	Phe	Asp	Pro	Gln	Lys	Tyr	Glu	Ala	His
72					325					330					335	
	Val	Pro	Glu		Ala	Val	Gly	His		Val	Gln	Arg	Leu		Val	Thr
74	70	-	<b>T</b>	340	Б.	70	0	D .	345	<b>m</b> .	70	7. 7	m)	350	Ŧ	<b>T</b> 1
75 76	Asp	Leu	355	Ата	Pro	Asn	Ser	360	Ата	Trp	Arg	Ата	365	ŢŊĽ	Leu	тте
	Met	Gly		Asp	Asp	Glv	Asp		Phe	Thr	Tle	Thr		His	Pro	Glu
78	1100	370	O T Y	7100	1100	Cry	375		1110	****	110	380			110	014
	Ser	Asn	Gln	Glý	Ile	Leu	Thr	Thr	Arg	Lys	Gly	Leu	Asp	Phe	Glu	Ala
80	385					390					395					400
	Lys	Asn	Gln	His		Leu	Tyr	Val	Glu		Thr	Asn	Glu	Ala		Phe
82	77.7	<b>.</b>	<b>T</b>	т	405	m)	0	ml	<b>7.7</b> -	410	<b>T1</b> .	57 - 3	77 - 7	17.5 -	415	<b>C</b> 1
84	vaı	Leu	ьуs	420	Pro	Tnr	Ser	Thr	425	Thr	TTE	vaı	vaı	H1S	vaı	GIU
	Asp	Val	Asn		Ala	Pro	Val	Phe		Pro	Pro	Ser	Lvs		Val	Glu
86	1101	• 42	435	014		110		440		110		232	445	• • • •		0_0
87	Val	Gln	Glu	Gly	Ile	Pro	Thr	Gly	Glu	Pro	Val	Cys	Val	Tyr	Thr	Ala
88		450					455					460				
		Asp	Pro	Asp	Lys		Asn	Gln	Lys	Ile		Tyr	Arg	Ile	Leu	
	465	D	n1_	C1	M	470	70.7 -	Mal	7	D 0	475	C	C1	C1 -	17-1	480
92	Asp	Pro	Ата	стХ	485	ьец	Ата	мес	ASP	490	ASD	ser	сту	GIII	495	TIIT
	Ala	Val	Glv	Thr		Asp	Ara	Glu	Asp		Gln	Phe	Val	Ara		Asn
94			1	500		1101	9		505					510		
95	Ile	Tyr	Glu	Val	Met	Val	Leu	Ala	Met	Asp	Asn	Gly	Ser	Pro	Pro	Thr
96			515					520					525			
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98	<i>α</i> 1	530	77-7	D	C1	D	535	C1 -	T1-	m	T1-	540	71	C1	C	D
	СІУ ) 545	Pro	vaı	Pro	GIU	550	_	GIN	тте	Thr	555		Asn	GIN	ser	560
			His	. Va	Lei			e Thi	^ Asr	o Tive			ı Sei	r Pro	o His	Thr
102			,		565					57(					575	
		r Pro	Phe	e Glr			ı Lei	ı Thi	Asp	Asp	Sei	Asp	o Ile	е Туз	r Trp	Thr
10	1			580	)				585	5				590	)	

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            595
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107 Phe Leu Lys Gln Asp Thr Tyr Asp Val His Leu Ser Leu Ser Asp His
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109 Gly Asn Lys Glu Gln Leu Thr Val Ile Arg Ala Thr Val Cys Asp Cys
110 625
                        630
                                            635
111 His Gly His Val Glu Thr Cys Pro Gly Pro Trp Lys Gly Gly Phe Ile
                    645
                                        650
113 Leu Pro Val Leu Gly Ala Val Leu Ala Leu Leu Phe Leu Leu Val
114
                                    665
115 Leu Leu Leu Val Arg Lys Lys Arg Lys Ile Lys Glu Pro Leu Leu
            675
                                680
116
                                                    685
117 Leu Pro Glu Asp Asp Thr Arg Asp Asn Val Phe Tyr Tyr Gly Glu Glu
                            695
                                                700
        690
119 Gly Gly Glu Glu Asp Gln Asp Tyr Asp Ile Thr Gln Leu His Arg
                        710
                                            715
121 Gly Leu Glu Ala Arg Pro Glu Val Val Leu Arg Asn Asp Val Ala Pro
                    725
                                        730
123 Thr Ile Ile Pro Thr Pro Met Tyr Arg Pro Arg Pro Ala Asn Pro Asp
                                    745
                740
125 Glu Ile Gly Asn Phe Ile Ile Glu Asn Leu Lys Ala Ala Asn Thr Asp
            755
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127 Pro Thr Ala Pro Pro Tyr Asp Thr Leu Leu Val Phe Asp Tyr Glu Gly
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                            775
                                                780
129 Ser Gly Ser Asp Ala Ala Ser Leu Ser Ser Leu Thr Ser Ser Ala Ser
                        790
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130 785
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138 <211> LENGTH: 3170
139 <212> TYPE: DNA
140 <213> ORGANISM: Homo sapiens
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145 cctccgagcc gtgccgggcg gtcttcaggg aggctgaagt gaccttggag gcgggaggcg 180
146 eggageagga geceggeeag gegetgggga aagtatteat gggetgeeet gggeaagage 240
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153 tetttggeea egetgtgtea gagaatggtg eeteagtgga ggaeeeeatg aacateteea 660
154 tcatcgtgac cgaccagaat gaccacaagc ccaagtttac ccaggacacc ttccgaggga 720
155 gtgtcttaga gggagtccta ccaggtactt ctgtgatgca ggtgacagcc acagatgagg 780
156 atgatgccat ctacacctac aatggggtgg ttgcttactc catccatagc caagaaccaa 840
```

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157 aggacccaca cgacctcatg ttcacaattc accggagcac aggcaccatc agcgtcatct 900 158 ccaqtqqcct qqaccqqqaa aaaqtccctq aqtacacact gaccatccaq gccacagaca 960 159 tqqatqqqqa cqqctccacc accacqqcaq tqqcaqtaqt qqaqatcctt gatqccaatg 1020 160 acaatgctcc catgtttgac ccccagaagt acgaggccca tgtgcctgag aatgcagtgg 1080 161 gccatgaggt gcagaggctg acggtcactg atctggacgc ccccaactca ccagcgtggc 1140 162 gtgccaccta ccttatcatg ggcggtgacg acggggacca ttttaccatc accacccacc 1200 163 ctgagagcaa ccagggcatc ctgacaacca ggaagggttt ggattttgag gccaaaaacc 1260 164 agcacaccct gtacgttgaa gtgaccaacg aggccccttt tgtgctgaag ctcccaacct 1320 165 ccacagccac catagtggtc cacgtggagg atgtgaatga ggcacctgtg tttgtcccac 1380 166 cctccaaagt cgttgaggtc caggagggca tccccactgg ggagcctgtg tgtgtctaca 1440 167 ctgcagaaga ccctgacaag gagaatcaaa agatcagcta ccgcatcctg agagacccag 1500 168 cagggtggct agccatggac ccagacagtg ggcaggtcac agctgtgggc accctcgacc 1560 169 gtgaggatga gcagtttgtg aggaacaaca tctatgaagt catggtcttg gccatggaca 1620 170 atggaagccc tcccaccact ggcacgggaa cccttctgct aacactgatt gatgtcaacg 1680 171 accatggccc agtccctgag ccccgtcaga tcaccatctg caaccaaagc cctgtgcgcc 1740 172 acgtgctgaa catcacggac aaggacctgt ctccccacac ctcccctttc caggcccagc 1800 173 tcacagatga ctcagacatc tactggacgg cagaggtcaa cgaggaaggt gacacagtgg 1860 174 tettgteet gaagaagtte etgaageagg atacatatga egtgeacett tetetgtetg 1920 175 accatqqcaa caaaqaqcaq ctqacqqtqa tcaqqqccac tqttqtqcqac tgccatqqcc 1980 176 atgtcqaaac ctqccctgqa ccctggaaag gaggtttcat cctccctgtg ctgggggctg 2040 177 tectggetet getgtteete etgetggtge tgettttgtt ggtgagaaag aageggaaga 2100 178 tcaaggagcc cctcctactc ccagaagatg acacccgtga caacgtcttc tactatggcg 2160 179 aagaqqqqqq tqqcqaagaq gaccaggact atgacatcac ccagctccac cgaggtctgg 2220 180 aggccaggcc ggaggtggtt ctccgcaatg acgtggcacc aaccatcatc ccgacaccca 2280 181 tgtaccqtcc taggccagcc aacccagatg aaatcggcaa ctttataatt gagaacctga 2340 182 aggeggetaa cacagaceee acageeeege eetacgacae eetettggtg ttegaetatg 2400 183 agggcagcgg ctccgacgcc gcgtccctga gctccctcac ctcctccgcc tccgaccaag 2460 184 accaagatta cgattatctg aacgagtggg gcagccgctt caagaagctg gcagacatgt 2520 185 acggtggcgg ggaggacgac taggcggcct gcctgcaggg ctggggacca aacgtcaggc 2580 186 cacagagcat ctccaagggg tctcagttcc cccttcagct gaggacttcg gagcttgtca 2640 187 ggaagtggcc gtagcaactt ggcggagaca ggctatgagt ctgacgttag agtggttgct 2700 188 teettageet tteaggatgg aggaatgtgg geagtttgae tteageactg aaaacetete 2760 189 cacctqqqcc aqqqttqcct cagaqqccaa gtttccagaa gcctcttacc tgccgtaaaa 2820 190 tgctcaaccc tgtgtcctgg gcctgggcct gctgtgactg acctacagtg gactttctct 2880 191 ctggaatgga accttcttag gcctcctggt gcaacttaat ttttttttt aatgctatct 2940 192 tcaaaacgtt agagaaagtt cttcaaaagt gcagcccaga gctgctgggc ccactggccg 3000 193 tectgeattt etggttteea gaeceeaatg ceteceatte ggatggatet etgegttttt 3060 194 atactgagtg tgcctaggtt gccccttatt ttttattttc cctgttgcgt tgctatagat 3120 195 aagggtgagg acaatcgtgt atatgtacta gaactttttt attaaagaaa

VERIFICATION SUMMARY

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